



Zhu JF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl. No. : 09/284,816 Confirmation No. 2849
Appellant : Philippe Malcorps et al.
Filed : June 14, 1999
TC/A.U. : 1761
Examiner : Curtis Edward Sherrer
Docket No. : 99-260
Customer No. : 34704

MS Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313

APPEAL BRIEF

Sir:

This is an appeal to the Board of Patent Appeals and Interferences of the final rejection of claims 40 - 45 and 47 - 65, in an office action mailed September 20, 2004, made by the Primary Examiner in Group Art Unit 1761.

REAL PARTY IN INTEREST

The real party in interest is INTEBREW of Grand-Place 1, B-1000 Bruxelles, Belgium.

RELATED APPEALS AND INTERFERENCES

There is no other prior and pending appeals, interferences, or judicial proceedings known to Appellants, Appellants' legal representative, or assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims 1 - 39 and 46 have been cancelled. Claims 40 - 45 and 47 - 65 are pending in the case, finally rejected, and on

appeal. A copy of claims 40 - 45 and 47 - 65 are in the Claims Appendix.

STATUS OF AMENDMENTS

No amendment was filed subsequent to the final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

It is important for a brewer to be able to offer a beer having a haze of good quality and capable of persisting, at least until the beer is consumed, without the need for a specific operation by the consumer. The aim of the present invention is to respond by providing a new fermented beverage with beer wort base having an improved haze. See page 2 of the specification, lines 24 - 31.

Accordingly, it is an object of the present invention to provide a fermented beverage with beer wort base whose haze stability is improved. It is another object of the present invention to provide a method for preparing a fermented beverage with beer wort base having a haze with improved persistence. It is another object of the present invention to use a specific compound to stabilize the hazes in fermented beverages with beer wort base. See page 3, lines 1 - 10 of the specification.

The claims on appeal are directed to a method for preparing a beer from a beer wort. The method includes the steps of cooking, boiling, cooling, fermenting the beer wort and storing the beverage obtained. See page 5, lines 12 - 17, of the specification. The method is characterized in that a natural or synthetic additive capable of forming at least temporarily stable complexes with protein fractions of the wort or of the beverage or of forming a suspension at least temporarily stable

in the wort or the beverage is added during the preparation of the beverage. See page 3, lines 17 - 23 of the specification.

To this end, the method comprises the step of adding a pectin, such as pectin E440. See page 4, lines 3 - 8, of the specification. The pectin adding step comprises adding the pectin E440 in a predetermined proportion of between 5 mg/l and 2000 mg/l, preferably about 10 to about 1000 mg/l, and more preferably of from about 50 to about 500 mg/l, of wort or of beer in order to inhibit coagulation and precipitation of proteins. See page 6, lines 14 - 19, of the specification. The pectin adding step and a centrifuging step (see page 10, last line) are conducted so as to obtain at least one of a persistent haze which remains at a temperature of 15°C and of a reversible haze which remains at a temperature of below 12°C and disappears at 15°C. The persistent irreversible haze and the reversible haze each have respective predetermined characteristics in terms of intensity and persistence over time in the event of storage. As pointed out on page 2 of the specification, lines 3 - 6, the main particles encountered in irreversible hazes are especially yeasts, protein or starch particles and oxalate crystals. As pointed out on page 2 of the specification, lines 11 - 12, reversible haze mainly consists of proteins and polyphenols.

To create a permanent haze, the pectin may be introduced into the beer wort while in a heated condition. See page 6, lines 4 - 10 of the specification.

The pectin may also be introduced into the beer when finished (see page 6, lines 11 - 13 of the specification) so as to slow down the speed of sedimentation of the reversible haze and to maintain the reversible haze in suspension.

The pectin may also be added in a nature and a quantity and under conditions which create beer particles having a mean

diameter of 0.3 μ m. See page 11, lines 9 - 14 of the specification.

Claim 49 on appeal relates to a fermented beverage including a beer prepared from a beer wort and prepared using the foregoing method.

Example 1 in the application (see page 9, line 25 to page 12, line 5 of the specification) demonstrates that a beer having pectin in accordance with the present invention possesses a haze of higher intensity. The example also shows that the stability of the haze during storage is improved by the addition of pectin. See Fig. 5 and page 11, line 21 et seq.

Example 2 shows the advantage of adding pectin to a finished product. The example shows that the additives have an effect of slowing down the speed of sedimentation of the reversible fraction of the haze of the beer and consequently prolong the persistence of the haze in the product. See page 12, lines 17 et seq. of the specification.

GROUNDS OF REJECTION

The following grounds of rejection are presented for review:

1. The rejection of claims 40, 41, 43 - 45, and 47 - 65 under 35 U.S.C. 103(a) as being unpatentable over *New Glarus Brewing Company Apple Ale Beer or Cock's Fine Brews* in view of *Ashurst, Production and Packaging of Non-Carbonated Fruit Juices and Fruits Beverages*, pp. 174 - 6, in view of U.S. Patent No. 4,355,110 to Line et al. and in further view of Appellants' alleged admissions on page 5; and

2. The rejection of claims 40 and 42 under 35 U.S.C. 103(a) as being unpatentable over the well known mixed drink

"Snakebite" in view of Line et al. and further in view of Appellants' alleged admissions.

ARGUMENT

(a) *Patentability of Claims*

40, 41, 43 - 45, and

47 - 65

As noted above, claims 40, 41, and 43 - 45 and 47 - 65 have been rejected over the combination of New Glarus Brewing Company Apple Ale Beer or Cock's Fine Brews in light of Ashurst in view of Line et al. and in further view of Appellants' alleged admissions.

A review of the New Glarus reference shows that it relates to an Apple Ale which has a brown ale base employing Wisconsin farmed wheat and a blend of three types of apples. Nowhere in the reference is there any disclosure of how the Apple Ale is made. Thus, the reference is non-enabling as it relates to the claimed method of the present invention because it does not place the claimed invention in the hands of one skilled in the art. See *In re Donohue*, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985).

The Cock's Fine Brew website relates to Fruit Beers and contains a recipe for Apples in the Snow. The recipe includes the steps of cutting the apples into slices, putting water into a pot, adding boiling hops and bringing to a boil, adding extract and corn sugar, boiling for 40 minutes, adding finishing hops and apples, steeping for 15 minutes, pouring the wort into cold water, pushing apples to one side and pitching yeast. Thereafter, the mixture is fermented for three weeks.

The website also has a recipe for making Washington Apple Ale. In this recipe, crushed dark crystal malt in a cheesecloth is placed into water to boil. When boiling commences the grain is removed and Telford's Yorkshire nut brown ale is added. Thereafter, sugar and honey are added. After boiling has stopped, cinnamon and sliced apples are added. Thereafter the apples are removed with strainer and the wort is transferred to the primary.

Still further, there is a recipe for Purdue Red Hot Apple Ale. In this recipe, water is brought to a boil and put into a brew bucket to cool. Thereafter, 1.5 gallons water and crystal malt are brought to a boil. The grain is removed. Thereafter, one adds extract, honey, Burton salts, and Irish moss and boil for 15 minutes. Then one adds red hot candies and the heat is turned low to allow the candies to melt. Then apples and cinnamon are added. The mixture is dumped into a brew bucket and then transfer to primary. The apples may be used to make applesauce.

It is submitted that Cock's Fine Brews reference, as well as the New Glarus Brewing Co. reference, does not teach or suggest the steps of cooking, boiling and fermenting a beer wort as for a pils type lager. It also does not teach the steps of adding pectin E440 in an amount between 5 mg/l and 2000 mg/l of wort or of beer in order to inhibit coagulation and precipitation of proteins. These references also do not disclose the step of centrifuging the wort so as to obtain at least one of a persistent haze which remains at a temperature of 15°C and of a reversible haze which remains at a temperature below 12°C and disappears at 15°C.

The Ashurst reference relied upon by the Examiner merely states that pectin can be found in fruits such as apples. A review of Ashurst shows that on page 176, it says that:

"[in early season fruit, amounts of soluble pectin may be low in the order of 0.1% by weight of juice. In later fruit, or in fruit from cold store, pectin may rise as high as 1 to 2.5% in the juice."

This leaves open the question that when any of the drinks in New Glarus and Cock's Fine Brews is manufactured is early season fruit, later fruit, or fruit from cold store used. Further, it leaves open the question of since the pectin may rise as high as 1 to 2.5%, what was the pectin content in the apples.

It is submitted that the Examiner has failed to show, or present any line of reasoning, which would lead one to conclude that any of New Glarus, Cock's Fine Brews, or Ashurst places the step of adding pectin in the claimed amount in the possession of one of ordinary skill in the art. There is no clear statement of such a method step in any of these references. It should also be noted that in the Cock's Fine Brews reference, the recipes are using apples or apple slices, not a juice, which apples are removed from at least two of the recipes and pushed to the side in the third.

With regard to the reference to Line et al., this patent is directed to a debranching enzyme (pullulanase) useful in the preparation of a low calorie beer and how this enzyme can be obtained from rice. Nowhere in the rejection does the Examiner state what portion of Line is being relied upon and for what purpose. It is assumed that the Examiner is relying upon Line for his use in Example 15 of centrifugation. Example 15 in Line et al. is directed to the conversion of all-malt wort prior to fermentation with rice pullulanase-malt beta amylase. In this

example, three wort samples were converted with malt beta-amylase in conjunction with decreasing concentrations of rice pullulanase. Another sample of the wort was converted using rice pullulanase in conjunction with glucoamylase. The worts were equilibrated with stirring in a water bath. Then enzyme concentrations were adjusted and incubation was allowed to continue for 30 minutes after which they were delivered into a flask contained in a vigorously boiling water bath. After remaining in the flask for 2 hours, the worts were then cooled and the resulting trub was removed by centrifugation.

How this portion of Line et al. would lead one of ordinary skill in the art to include a centrifugation step in the production of any of the drinks in New Glarus or Cock's Fine Brews escapes Appellants. The Examiner has not explained why one of ordinary skill in the art would be motivated to include a centrifugation step in the production of any of these drinks. At best, the Examiner has shown that centrifugation is known in the prior art. Appellants submit that something more is needed in order to make a *prima facie* case of obviousness. See *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Certainly, there is nothing in Line et al. which would teach a centrifugation step of centrifuging the wort so as to obtain at least one of a persistent haze which remains at a temperature of 15°C and of a reversible haze which remains at a temperature below 12°C and disappears at 15°C. Nor does the Examiner explain why New Glarus or Cock's Fine Brews would want to have such properties in their beverages.

With regard to the alleged admissions, nowhere in the final rejection does the Examiner point out what specific admissions are being relied upon. Presumably, he is relying on Appellants statements at the bottom of page 5 of the specification about

cooking, boiling or fermenting the wort. However, these alleged admissions do not cure the above-noted deficiencies. Nor does it follow that one of ordinary skill in the art would use all these steps to form any of the drinks cited in the primary references. Here again, the best that the Examiner has shown is that certain steps in the method are known in the art. It is submitted that this is insufficient to establish a *prima facie* case of obviousness. The Examiner has not explained what would motivate one of ordinary skill in the art to employ these steps in the manufacture of drinks in the primary references.

For these reasons, it is submitted that the subject matter of claim 40 is not taught or suggested by the cited and applied references and is therefore allowable.

With regard to claim 41, this claim is allowable because none of the cited and applied references teach or suggest introducing the pectin into a beer wort while in a heated condition so as to create a permanent haze. If the Examiner is going to take the position that this is inherent in the references, he must present a line of reasoning to support such a conclusion. It must be shown that the undisclosed information was known to be present in the subject matter of the reference. See *Continental Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 1269, 20 USPQ2d 1746, 1749-50 (Fed. Cir. 1991). Inherency can not be established by probabilities or possibilities. See *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981). It is submitted that the Examiner has not presented the necessary line of reasoning and shown the undisclosed information to be present in the subject matter of the reference.

Claim 43 is allowable because none of the cited and applied references teaches or suggests adding the pectin in the claimed proportion.

Claim 44 is allowable because none of the cited and applied references teaches or suggest adding the pectin in the claimed proportion.

Claim 45 is allowable because none of the cited and applied references teaches or suggest adding the pectin in the claimed proportion.

Claim 47 is allowable because none of the cited and applied references teaches or suggests the step of varying the proportion of the pectin which is added in an inverse proportion to the degree of reactivity and the degree of purity of the pectin an dependent on the time when the pectin is added.

Assuming arguendo that New Glarus, Cock's Fine Brew, and Ashurst teach adding pectin, they do it in a non-variable proportion.

Claim 48 is allowable because none of the cited and applied references teaches or suggests adding the pectin in a nature and a quantity and under conditions which create beer particles having a mean diameter of 0.3 μm . All of the cited and applied references are silent on this point.

Claim 49 is allowable because none of the cited and applied references teach or suggest making a fermented beverage prepared using the method of claim 40.

Claim 50 is allowable because none of the cited and applied references teaches or suggests a method for preparing a fermented beverage which includes a step of adding pectin in sufficient amount ... to maintain a permanent haze during the beer making and in the finished beer. Further, as discussed above, there is no reason to centrifuge any of the beverages in the New Glarus and Cock's Fine Brews references. In other words, claim 50 is allowable for the same reasons as claim 40.

Claim 51 is allowable for the same reasons as claim 50.

Claims 52, 53, 54, and 55 are each independently allowable because is allowable because none of the cited and applied references teaches or suggest adding the pectin in the claimed proportion set forth in each of these claims.

Claim 56 is allowable because none of the cited and applied references teaches or suggests a method for preparing a fermented beverage which includes a step of adding pectin in sufficient amount ... to maintain a reversible haze during the beer making and in the finished beer. Further, as discussed above, there is no reason to centrifuge any of the beverages in the New Glarus and Cock's Fine Brews references. In other words, claim 56 is allowable for the same reasons as claim 40.

Claim 57 is allowable for the same reasons as claim 52.

Claims 58, 59, 60, and 61 are each independently allowable because is allowable because none of the cited and applied references teaches or suggest adding the pectin in the claimed proportion set forth in each of these claims.

Claim 62 and 63 are allowable for the same reasons as claim 40. Further, claim 62 is allowable because none of the cited and applied references teaches or suggests conducting the pectin adding and centrifuging steps so as to obtain at least one of a persistent irreversible haze which remains at room temperature and of a reversible haze which forms at low temperature and disappears at room temperature. Still further, claim 63 is allowable because none of the cited and applied references teaches or suggests conducting the pectin adding step and the centrifuging step so as to obtain at least one of a persistent irreversible haze which remains at a temperature of 20°C and of a reversible haze which remains at a temperature of 2°C and disappears at 20°C.

Claims 64 and 65 are each allowable because none of the cited and applied references teach or suggest adding pectin in the claimed proportion of between 5 mg/l and 2000 mg/l of wort or of beer.

It is also noted that the rejection of claims 40, 41, 43 - 45, and 47 - 65 fails because the Examiner has failed to make any statements as to what would motivate one of ordinary skill in the art to combine the references in the manner suggested by the Examiner.

(b) *Patentability of Claims*

*40 and 42 over Snakebite,
Line, and Alledged Admissions*

Claim 40 is patentable because the cited and applied references do not teach or suggest the claimed method steps. Most particularly, none of the cited and applied references teach or suggest the step of adding pectin E440 in a predetermined portion of between 5 mg/l and 2000 mg/l of wort or of beer. In response to this, the Examiner on page 3, last paragraph of the final rejection, points to the Ashurst patent and states that Ashurst typically discloses the amount of pectin typically found in apple juice. The reference to Ashurst is inappropriate because the Examiner has not relied upon Ashurst to reject claims 40 and 42 in this combination of references. The Examiner then goes on to state that "... Snakebite is generally ... half beer and half apple juice, it is seen that the pectin values that would be in Snakebite meets the claim limitations." Appellants submit that the Examiner's analysis falls far short of what is needed to show that the pectin values

are within the claimed range. For example, a review of Ashurst shows that on page 176, it says that:

"[in early season fruit, amounts of soluble pectin may be low in the order of 0.1% by weight of juice. In later fruit, or in fruit from cold store, pectin may rise as high as 1 to 2.5% in the juice."

This leaves open the question that when Snakebite is manufactured is early season fruit, later fruit, or fruit from cold store used to form the apple juice. Further, it leaves open the question of since the pectin may rise as high as 1 to 2.5%, what was the pectin content of the juice.

The Examiner's position also leaves open the question of what the mixture of beer and apple juice in Snakebite is. On this point, note the Examiner's observation that Snakebite is generally half beer and half apple juice. This statement means that Snakebite may have a different composition than 50 - 50.

In any event, the Examiner has failed to show that when Snakebite is made pectin is added in the claimed amount. Clearly, there is nothing in any prior art cited and applied by the Examiner which would show that the prior art would enable such a method step.

Still further, the Examiner has not shown a reference for making Snakebite which includes any of the other steps set forth in claim 40 - namely, the cooking, boiling, and fermenting the beer wort as for a pils-type beer; the centrifuging of the wort so that at least one of a persistent haze which remains at a temperature of 15°C and of a reversible haze which remains at a temperature below 12°C and disappears at 15°C is obtained.

With regard to the secondary reference to Line et al., this patent is directed to a debranching enzyme (pullulanase) useful in the preparation of a low calorie beer and how this enzyme can

be obtained from rice. Nowhere in the rejection does the Examiner state what portion of Line is being relied upon and for what purpose. It is assumed that the Examiner is relying upon Line for his use in Example 15 of centrifugation. Example 15 in Line et al. is directed to the conversion of all-malt wort prior to fermentation with rice pullulanase-malt beta amylase. In this example, three wort samples were converted with malt beta-amylase in conjunction with decreasing concentrations of rice pullulanase. Another sample of the wort was converted using rice pullulanase in conjunction with glucoamylase. The worts were equilibrated with stirring in a water bath. Then enzyme concentrations were adjusted and incubation was allowed to continue for 30 minutes after which they were delivered into a flask contained in a vigorously boiling water bath. After remaining in the flask for 2 hours, the worts were then cooled and the resulting trub was removed by centrifugation.

How this portion of Line et al. would lead one of ordinary skill in the art to include a centrifugation step in the production of Snakebite escapes Appellants. The Examiner has not explained why one of ordinary skill in the art would be motivated to include a centrifugation step in the production of Snakebite, a drink completely different from what is being discussed in Line et al. At best, the Examiner has shown that centrifugation is known in the prior art. Appellants submit that something more is needed in order to make a *prima facie* case of obviousness. See *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Certainly, there is nothing in Line et al. which would teach a centrifugation step of centrifuging the wort so as to obtain at least one of a persistent haze which remains at a temperature of 15°C and of a reversible haze which remains at a temperature below 12°C and disappears at 15°C.

With regard to the alleged admissions, nowhere in the final rejection does the Examiner point out what admissions are being relied upon. Presumably, he is relying on Appellants statements at the bottom of page 5 of the specification about cooking, boiling or fermenting the wort. However, these alleged admissions do not cure the above-noted deficiencies. Nor does it follow that one of ordinary skill in the art would use all these steps to form Snakebite. Here again, the best that the Examiner has shown is that certain steps in the method are known in the art. It is submitted that this is insufficient to establish a *prima facie* case of obviousness. The Examiner has not explained what would motivate one of ordinary skill in the art to employ these steps in the manufacture of Snakebite.

For these reasons, it is believed that the Examiner has failed to set forth a *prima facie* case of obviousness and that claim 40 is allowable over the cited and applied references.

With regard to claim 42, this claim is allowable because none of the references teach or suggest the step of introducing the pectin into the beer when finished so as to slow down the speed of sedimentation of the reversible haze and to maintain reversible haze in suspension. While Snakebite may include pectin as part of apple juice which is added to beer, it is not clear from anything produced by the Examiner that it would slow down the speed of sedimentation of any reversible haze and/or maintain a reversible haze in suspension. Claim 42 is also allowable for the same reasons that claim 40 is allowable.

CONCLUSION

For the foregoing reasons, the Board is hereby requested to reverse the rejections of claims 40 - 45 and 47 - 65 and remand

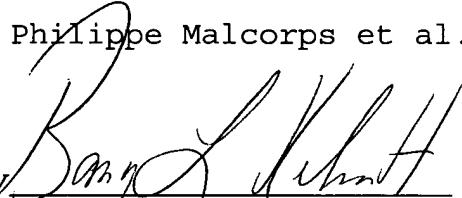
the application to the Primary Examiner for allowance and issuance.

APPEAL BRIEF FEE

A check in the amount of \$500.00 is enclosed herewith to cover the cost of the Appeal Brief fee. Should the Director determine that an additional fee is due, he is hereby authorized to charge said fee to Deposit Account No. 02-0184.

Respectfully submitted,

Philippe Malcorps et al.

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IN TRIPPLICATE

Date: March 3, 2005

I, Nicole Motzer, hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on March 3, 2005.



CLAIMS APPENDIX

USSN 09/284, 816



40. A method for preparing a beer from a beer wort, said method comprising steps of cooking, boiling, and fermenting said beer wort as for a pils-type beer, wherein said method further comprises, in contrast to a pils-type beer, a step of adding pectin E440 and a step of centrifuging the wort, said pectin adding step comprising adding pectin E440 in a predetermined proportion of between 5 mg/l and 2000 mg/l of wort or of beer in order to inhibit coagulation and precipitation of proteins, said pectin adding step and said centrifuging step being conducted so as to obtain at least one of a persistent haze which remains at a temperature of 15°C and of a reversible haze which remains at a temperature below 12°C and disappears at 15°C, said persistent irreversible haze and said reversible haze each having respective predetermined characteristics in terms of intensity and persistence over time in the event of storage.

41. A method according to claim 40, further comprising introducing said pectin into the beer wort while in a heated condition so as to create a permanent haze.

42. A method according to claim 40, further comprising introducing said pectin into the beer when finished so as to slow down the speed of sedimentation of the reversible haze and to maintain said reversible haze in suspension.

43. A method according to claim 40, further comprising adding said pectin in a proportion of between 10 mg/l and 1000 mg/l.

44. A method according to claim 43, wherein said adding step comprises adding said pectin in a proportion of between 50 mg/l and 500 mg/l.

45. A method according to claim 43, wherein said adding step comprises adding said pectin in a proportion on the order of from 100 mg/l to 300 mg/l.

47 A method according to claim 40, wherein said pectin adding step comprises varying the proportion of said pectin which is added in an inverse proportion to the degree of reactivity and the degree of purity of said pectin and dependant on the time when the pectin is added.

48. A method according to claim 40, further comprising adding said pectin in a nature and a quantity and under conditions which create beer particles having a mean diameter of 0.3 μm .

49. Fermented beverage including a beer prepared from a beer wort, characterized in that said beverage is prepared using the method according to claim 40.

50. A method for preparing a fermented beverage including a beer from a beer wort, said method comprising a preparing step including a step of adding pectin in sufficient amount during said preparing step to maintain a permanent haze during the beer making and in the finished beer, cooling said beer wort, and centrifuging said cooled beer wort.

51. A method according to claim 50 wherein said pectin adding step comprises adding pectin E 440.

52. A method according to claim 50 wherein said adding step comprises adding said pectin in a proportion of between 10 mg/l and 1000 mg/l.

53. A method according to claim 50 wherein said adding step comprises adding said pectin in a proportion of between 50 mg/l and 500 mg/l.

54. A method according to claim 50 wherein said adding step comprises adding said pectin in a proportion of between 100 mg/l to 300 mg/l.

55. A method according to claim 50 wherein said adding step comprises adding said pectin in a proportion of between 5 mg/l and 2000 mg/l of wort or of beer.

56. A method for preparing a fermented beverage including a beer from a beer wort, said method comprising a preparing step including a step of adding pectin in sufficient amount during said preparing step to maintain a reversible haze during the beer making and in the finished beer, cooling the beer wort after addition of said pectin, and centrifuging the cooled beer wort.

57. A method according to claim 52 wherein said pectin adding step comprises adding pectin E 440.

58. A method according to claim 56 wherein said adding step comprises adding said pectin in a proportion of between 10 mg/l and 1000 mg/l.

59. A method according to claim 56 wherein said adding step comprises adding said pectin in a proportion of between 50 mg/l and 500 mg/l.

60. A method according to claim 56 wherein said adding step comprises adding said pectin in a proportion of between 100 mg/l to 300 mg/l.

61. A method according to claim 56 wherein said adding step comprises adding said pectin in a proportion of between 5 mg/l and 2000 mg/l of wort or of beer.

62. A method for preparing a beer from a beer wort, said method comprising steps of cooking, boiling, and fermenting said beer wort as for a pils-type beer, wherein said method further comprises, in contrast to a pils-type beer, a step of adding pectin E440 and a step of centrifuging the wort, said pectin adding step comprising adding pectin E440 in a predetermined proportion in order to inhibit coagulation and precipitation of proteins, said pectin adding step and said centrifuging step being conducted so as to obtain at least one of a persistent irreversible haze which remains at room temperature and of a reversible haze which forms at low temperature and disappears at room temperature, said persistent irreversible haze and said reversible haze each having respective predetermined characteristics in terms of intensity and persistence over time in the event of storage.

63. A method for preparing a beer from a beer wort, said method comprising steps of cooking, boiling, and fermenting said beer wort as for a pils-type beer, wherein said method further comprises, in contrast to a pils-type beer, a step of adding

pectin E440 and a step of centrifuging the wort, said pectin adding step comprising adding pectin E440 in a predetermined proportion in order to inhibit coagulation and precipitation of proteins, said pectin adding step and said centrifuging step being conducted so as to obtain at least one of a persistent irreversible haze which remains at a temperature of 20°C and of a reversible haze which remains at a temperature of 2°C and disappears at 20°C, said persistent irreversible haze and said reversible haze each having respective predetermined characteristics in terms of intensity and persistence over time in the event of storage.

64. A method according to claim 62, further comprising adding said pectin in a proportion of between 5 mg/l and 2000 mg/l of wort or of beer.

65. A method according to claim 63, further comprising adding said pectin in a proportion of between 5 mg/l and 2000 mg/l of wort or of beer.